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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/581,731

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Byron P. Day

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KIMBERLY-CLARK WORLDWIDE, INC.
Catherine E. Wolf
401 NORTH LAKE STREET
NEENAH, WI 54956

EXAMINER

TOLIN, MICHAEL A

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

08/11/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/581,731	Applicant(s) DAY ET AL.	
	Examiner MICHAEL A. TOLIN	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02 June 2009 has been entered.

Interview summary of 03 August 2009

2. The examiner called Applicant's representative on 03 August 2009 to indicate that the new amendment to claim 1 does not appear to distinguish over the process of Patchell because step "c" does not indicate that the film without rupture at the pattern areas is exposed to hot air. For example, the film may be formed without rupture, subsequently stretched to form ruptures, and then exposed to hot air to further open up the ruptures as material moves from thinner areas to the thicker areas. The examiner suggested using the language --exposing said film without rupture in the pattern areas-- in step "c" to define over Patchell. The examiner also indicated that further search and consideration would be required to determine if this language makes the claims allowable. Applicant's representative authorized such an amendment to the independent claims by examiner's amendment if it would make the claims allowable.

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However, in view of a newly discovered reference to Yamamoto, such an amendment does not appear to make the claims patentable. The teachings in Yamamoto are explained in the rejections below. Accordingly, the suggested amendment has not been entered. Should Applicant argue that the language proposed by the examiner does render the claims patentable, Applicant would need to provide an amendment inserting this language to ensure the arguments are commensurate in scope with the claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cree (US 2003/0022582) in view of Yamamoto (JP 03-030934), Patchell (US 3441638) and Hovis (US 4842794).

Cree teaches a method of producing a laminate material comprising the steps of bonding a perforated thermoplastic film to a nonwoven material to create a netting a nonwoven material laminate, the perforated film satisfying the claimed netting material (Abstract; paragraphs 24, 31, 33 and 39). Cree is not particularly limited to a specific manner of forming a perforated film. Yamamoto forms a perforated thermoplastic film by extruding the film, forming a pattern of shapes defined by thick and thin areas without

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rupture at the pattern areas, and exposing the film to hot air to create a pattern of open spaces within said film (Abstract; Figures 1-5). In particular, it is clear from the Abstract and Figures 2-5, that the film is embossed and unruptured prior to thermal treatment station 6 where hot air is blown vertically against the embossed and unruptured film to provide openings in the embossed areas. While the examiner acknowledges that Yamamoto also suggests the use of a masking material to prevent hot air from opening embossed areas in a central region of the film, one of ordinary skill in the art would have readily appreciated that the technique is equally suitable for perforating an entire film if desired, simply by refraining from using such masking material. Moreover, the claims do not preclude providing the film with a central region which does not have open spaces. An oral translation of Yamamoto was obtained by the examiner on 05 August 2009. Yamamoto does not appear to recite that the hot-air causes the polymer to flow from the thin areas to the thick areas. However, such is considered inherent in the process of Yamamoto. For example, Patchell explains that such heating causes thinned areas to merge with the main solid material, i.e. flow to the thick areas of the main material (column 3, lines 1-11). Moreover, the fact that openings are formed in the process of Yamamoto clearly indicates that the material in the thinned embossed areas has moved to the thicker areas. As to exposing the film to hot air while the film is under tension, it is known to provide such heating under tension in order to prevent the film from shrinking. For example, Hovis teaches a process in which heating, for example by hot air, is used to cause material to flow from thinned areas to thicker areas as openings in the thinned areas are expanded. Hovis teaches that the film should be restrained,

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i.e. placed under tension, during such heating so that its physical dimensions are held constant (column 2, lines 44-51; column 4, lines 45-52; column 6, lines 24-34). As to reasonable expectation of success, Cree is directed to forming perforations in an elastic polymeric film (paragraph 24). It is clear from Hovis that such materials also shrink and open in thinned portions when subjected to heating (column 5, lines 45-58). It would have been obvious to one of ordinary skill in the art at the time of the invention to form the open spaces in the film material using the claimed extruding, forming and exposing limitations because one of ordinary skill in the art would have been motivated to use known suitable methods for forming the perforated film desired by Cree, such as the method suggested by Yamamoto as set forth above. As to the step of applying hot air while the film is under tension, this limitation would have been obvious to one of ordinary skill in the art at the time of the invention because one of ordinary skill in the art would have been motivated to maintain the physical dimensions of the film during such heating in accordance with the teachings of Hovis.

Regarding claim 3, the material of Cree is clearly a stretch material.

The limitation of claim 5 has been satisfied for the reasons provided above.

5. Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morman'992 (US 5226992) in view of Cree, Yamamoto, Patchell and Hovis.

Morman'992 and Cree are applied as in numbered paragraph 3 of the office action mailed 21 May 2008.

Yamamoto, Patchell and Hovis are applied as above in the rejection of claims 1, 3 and 5 for suggesting the particular claimed extruding, forming and exposing steps to form a perforated film.

6. Claims 1, 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cree in view of Patchell and Hovis.

Cree is applied as above in the rejection of claims 1, 3 and 5.

As noted above in the interview summary section, the current claim language does not preclude an additional step between the claimed steps “b” and “c”. Patchell suggests perforating a film material by providing a film material, embossing to form a pattern of shapes defined by thick and thin areas without rupture at the pattern areas, and exposing the film to hot air to cause polymer to flow from thin areas to thick areas thereby creating a pattern of open spaces within the film (column 2, lines 35-60; column 3, lines 1-12; column 4, lines 10-21 and lines 52-57; column 5, lines 39-42; Figures 1-4 and 14). While the examiner acknowledges that Patchell performs a step of stretching which partially opens up the thinned areas prior to the exposing with hot air step, the claims do not preclude such a stretching step nor do the claims require that the exposing step is performed on the film while it is still without rupture in the pattern areas. Hovis is applied as above in the rejection of claims 1, 3 and 5 for suggesting heating under tension and for providing a reasonable expectation of success with respect to the elastic materials suggested by Cree. It would have been obvious to one of ordinary skill in the art at the time of the invention to form the open spaces in the film

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material using the claimed extruding, forming and exposing limitations because one of ordinary skill in the art would have been motivated to use known suitable methods for forming the perforated film desired by Cree, such as the method suggested by Patchell as set forth above.

7. Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morman'992 in view of Cree, Patchell and Hovis.

Morman'992 and Cree are applied as in numbered paragraph 3 of the office action mailed 21 May 2008.

Patchell and Hovis are applied as immediately above in the rejection of claims 1, 3 and 5 for suggesting the particular claimed extruding, forming and exposing steps to form a perforated film.

Response to Arguments

8. Applicant's arguments with respect to claims 1 and 3-6 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL A. TOLIN whose telephone number is (571)272-8633. The examiner can normally be reached on M-F 9am to 5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael A Tolin/
Patent Examiner, Art Unit 1791